



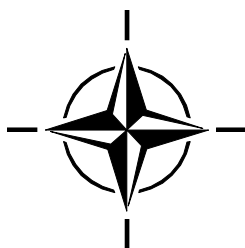
**RTO MEETING PROCEEDINGS**

**MP-HFM-142**

## **Adaptability in Coalition Teamwork**

(Facultés d'adaptation au travail d'équipe en coalition)

Papers presented at the RTO Human Factors and Medicine Panel (HFM)  
Symposium held in Copenhagen, Denmark 21-23 April 2008.



Published April 2008

# The Research and Technology Organisation (RTO) of NATO

RTO is the single focus in NATO for Defence Research and Technology activities. Its mission is to conduct and promote co-operative research and information exchange. The objective is to support the development and effective use of national defence research and technology and to meet the military needs of the Alliance, to maintain a technological lead, and to provide advice to NATO and national decision makers. The RTO performs its mission with the support of an extensive network of national experts. It also ensures effective co-ordination with other NATO bodies involved in R&T activities.

RTO reports both to the Military Committee of NATO and to the Conference of National Armament Directors. It comprises a Research and Technology Board (RTB) as the highest level of national representation and the Research and Technology Agency (RTA), a dedicated staff with its headquarters in Neuilly, near Paris, France. In order to facilitate contacts with the military users and other NATO activities, a small part of the RTA staff is located in NATO Headquarters in Brussels. The Brussels staff also co-ordinates RTO's co-operation with nations in Middle and Eastern Europe, to which RTO attaches particular importance especially as working together in the field of research is one of the more promising areas of co-operation.

The total spectrum of R&T activities is covered by the following 7 bodies:

- AVT Applied Vehicle Technology Panel
- HFM Human Factors and Medicine Panel
- IST Information Systems Technology Panel
- NMSG NATO Modelling and Simulation Group
- SAS System Analysis and Studies Panel
- SCI Systems Concepts and Integration Panel
- SET Sensors and Electronics Technology Panel

These bodies are made up of national representatives as well as generally recognised 'world class' scientists. They also provide a communication link to military users and other NATO bodies. RTO's scientific and technological work is carried out by Technical Teams, created for specific activities and with a specific duration. Such Technical Teams can organise workshops, symposia, field trials, lecture series and training courses. An important function of these Technical Teams is to ensure the continuity of the expert networks.

RTO builds upon earlier co-operation in defence research and technology as set-up under the Advisory Group for Aerospace Research and Development (AGARD) and the Defence Research Group (DRG). AGARD and the DRG share common roots in that they were both established at the initiative of Dr Theodore von Kármán, a leading aerospace scientist, who early on recognised the importance of scientific support for the Allied Armed Forces. RTO is capitalising on these common roots in order to provide the Alliance and the NATO nations with a strong scientific and technological basis that will guarantee a solid base for the future.

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# **Adaptability in Coalition Teamwork**

## **(RTO-MP-HFM-142)**

### **Executive Summary**

Multinational coalitions are a complicated assembly of individuals, networks and organizations required to perform as teams, often ad-hoc or in a distributed environment. The cultural diversity inherent in coalition teams challenges leaders and team members to recognize the cultural biases of their own and others' thoughts and their manifested predisposition to behaviour. Diversity can either enhance or hinder team performance along the full spectrum of military operations. Models, methods and tools that support rapid development of effective multicultural teams are needed to ensure mission success that is dependent on a high degree of interoperability and collaboration among team members. NATO leaders and the international research community must leverage what is known about individual differences, organizational structure and processes, national/organizational/military cultures, teams, and training in order to provide a model of coalition teamwork that can be used to guide doctrine, training, personnel, and organization.

The research symposium on 'Adaptability in Coalition Teamwork' in Copenhagen on April 21-23 2008 intended to study the theme as mentioned above. The main results of the 30 theoretical and research papers were as follows:

- Training tools (games, simulations) really work and seem to be effective in dealing with cultural diversity in coalition teamwork, at least to some extent;
- Tested in different national teams different responses to stimuli emerged, in terms of performance but also in terms of goal setting and problem solution;
- Confirming previous studies in the civilian sector, differences evolved between national groups and multinational groups; these differences relate to trust, flexibility and performance;
- Training with role playing seems to work really well in developing cultural skills among servicemen;
- Feedback information on team morale and performance during operations is an instrument that is highly valued by commanders in the field; and
- Differences in language proficiency in English confound research output as much as they do in everyday operational life.

Overall, these results have underlined the importance of the theme and they have indicated a number of ways of dealing with the issues at stake. These results may lead to basic insights on how to deal with training and selecting military people in order to perform successfully in multinational teams. This work, however, cannot be considered to be complete or finished. A number of challenges ahead have been formulated that will induce more researchers from more member nations to participate in future studies in this area. These studies need to be conducted closer to the field of operations, and in closer connection with 'reflective', experienced commanders.

# **Facultés d'adaptation au travail d'équipe en coalition**

## **(RTO-MP-HFM-142)**

### **Synthèse**

Les coalitions multinationales sont constituées d'un ensemble compliqué d'individus, de réseaux et d'organisations nécessaires pour travailler en équipes, souvent ad hoc ou dans un environnement distribué. La diversité culturelle inhérente aux équipes de coalition met au défi les dirigeants et les membres des équipes de reconnaître leurs préjugés culturels et d'accepter les opinions des autres et les prédispositions qu'ils mettent en évidence dans leur manière d'agir. La diversité peut aussi bien améliorer que diminuer les performances d'une équipe sur tout l'éventail des opérations militaires. Des modèles, des méthodes et des outils sont nécessaires au développement rapide d'équipes multiculturelles efficaces pour assurer le succès des missions, celles-ci étant tributaires du haut degré d'interopérabilité et de coopération entre les membres des équipes. Les dirigeants de l'OTAN et la communauté de la recherche internationale doivent tirer parti des connaissances actuelles sur les différences entre individus, sur la structure et les procédés organisationnels, sur les cultures nationales/organisationnelles/militaires, sur les équipes et la formation afin d'offrir un modèle de travail d'équipe en coalition qui puisse être utilisé pour orienter la doctrine, la formation, le personnel et l'organisation.

Le symposium de recherche sur les 'Facultés d'adaptation au travail d'équipe en coalition' qui s'est tenu à Copenhague du 21 au 23 avril 2008 était destiné à étudier le thème mentionné ci-dessus. Les principaux résultats des 30 communications théoriques et de recherche ont été les suivants :

- Les outils de formation (jeux, simulations) fonctionnent réellement et semblent être efficaces pour prendre en compte la diversité culturelle dans le travail d'équipe en coalition, au moins jusqu'à un certain point ;
- Testés sur différentes équipes nationales, les stimuli ont fait apparaître des réponses différentes, en termes de performances mais aussi en termes de détermination des objectifs et de solution des problèmes.
- Confirmant des études faites auparavant dans le secteur civil, des différences se sont développées entre les groupes nationaux et les groupes internationaux ; ces différences sont relatives à la confiance, à la flexibilité et aux performances ;
- La formation faisant appel aux jeux de rôle semble bien marcher pour développer les savoir-faire culturels parmi les militaires ;
- Le retour d'information sur le moral et les performances des équipes en opérations est un instrument qui est particulièrement apprécié par les commandants sur le terrain ; et
- Les différences de niveau en Anglais provoquent des confusions aussi bien pour les résultats de la recherche que dans la vie quotidienne en opérations.

En général, ces résultats ont souligné l'importance de ce sujet et ils ont indiqué un certain nombre de façons de traiter les questions en jeu. Ces résultats peuvent conduire à des idées de base sur la manière de traiter la formation et la sélection des militaires pour être performant en équipes multinationales. Cependant, ce travail ne peut être considéré comme étant complet ou fini. Un certain nombre de défis à venir ont été formulés qui impliqueront plus de chercheurs provenant d'un plus grand nombre de nations membres pour participer aux futures études dans ce domaine. Il est nécessaire que ces études soient conduites plus près du théâtre des opérations et en collaboration plus étroite avec les commandants expérimentés et 'réfléchis'.



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14. ABSTRACT This symposium was the primary deliverable for the HFM-138 Research Task Group also titled 'Adaptability in Coalition Teamwork.' During this fruitful symposium many findings based on experiments in multinational teamwork have been presented, showing that different national responses to stimuli emerge in terms of goal setting, problem solving, trust, flexibility and general performance. Differences between national and multinational teams were revealed. These results lead to basic insights on how to deal with training and selecting military people in order to perform successfully in multinational teams. This work, however, cannot be considered to be complete or finished. A number of challenges ahead have been formulated that will induce more researchers from more member nations to participate in future studies in this area. These studies need to be conducted closer to the field of operations, and in closer connection with 'reflective', experienced commanders.					
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